

LS 25
15

CHICAGO STEEL STANDARD HAND BRAKE

Instruction Sheet and Parts List

While we take extraordinary precautions to have adjustments on our Brakes set properly for regular work, sometimes after handling and transportation, they require some adjustment.

See that the Brake sets level on the floor, so that top leaf does not creep forward when clamping. If the top leaf does creep forward when clamping, first, check the tightness of set screw (P) and cap screw (O). If this does not remedy the creeping, place a wedge under the rear of the leg at point (8), on side that creeps. Bring the wedge in until this creeping is eliminated, then replace the wedge with a permanent block of the correct height.

Check the bending leaf and see that the edge is ($1/64$ ") below the bed edge when the bending leaf is in the down position. This edge should be ($1/64$ ") below the bed edge on the ends and ($1/32$ ") lower in the center. The bending leaf ends can be lowered by tightening set screw (J). To raise ends of bending leaf, tighten set screw (H). To lower the bending leaf in center, tighten truss rod bolt (7). To raise bending leaf in center, tighten truss rod bolt (2).

If sheet bends over further on one end than the other, set the top leaf back on end where sheet is bent over too far. This is done by loosening cap screw (O), and setting adjustment with set screws (P) and (M).

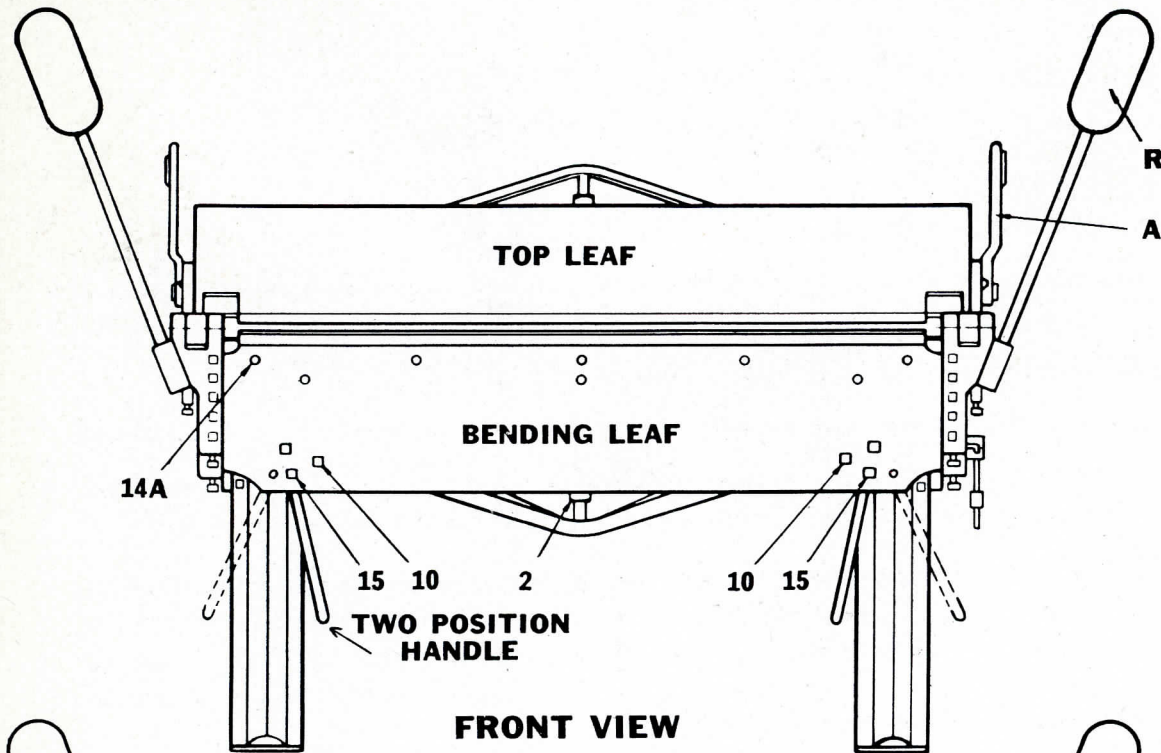
Bending leaf may become bowed in center after use. This can be straightened out quickly by tightening both bolts (10) until center is brought into a straight line.

Adjustment for clamping different thicknesses of metal is made by loosening set screw (BB) which holds link block (EE), and adjusting set screw (FF) until the desired pressure is obtained, when clamping on the thickness of metal to be bent. When this adjustment is made, tighten set screw (BB).

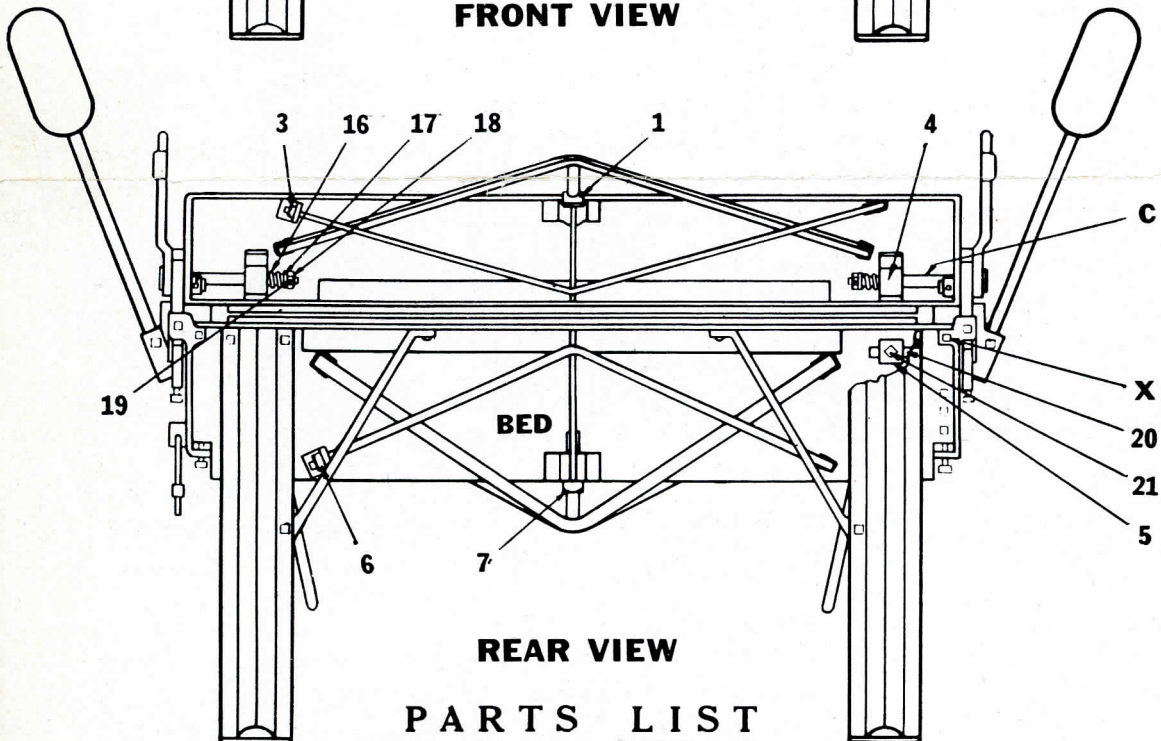
Set the top leaf back at bending edge twice the thickness of the metal for bending within four gauges of capacity. Move forward proportionately on lighter material if sharper bends are desired. This adjustment is made by loosening cap screw (O) and adjusting set screws (M) and (P), as required. It is important that cap screw (O) be tightened after the upper jaw is set to its correct point.

ALL BRAKES ARE RATED FOR (1") MINIMUM FLANGE ON CAPACITY MATERIAL. MACHINE CAN BE USED FOR CAPACITY BENDING ONLY WHEN ANGLE BAR (S-SS) IS IN PLACE IN THE STANDARD POSITION.

When Bar (U-6) $1/2$ " bending edge is in place, the capacity of the machine is reduced four gauges. When this (U-6) bar is used, the angle bar (SS) must be set in the low position. When Bar (U-5) $1/4$ " bending edge is in use, the capacity of the Brake is reduced seven gauges and the angle bar (SS) should be in the low position. Holes are provided in bending leaf and in angle bar for



FRONT VIEW

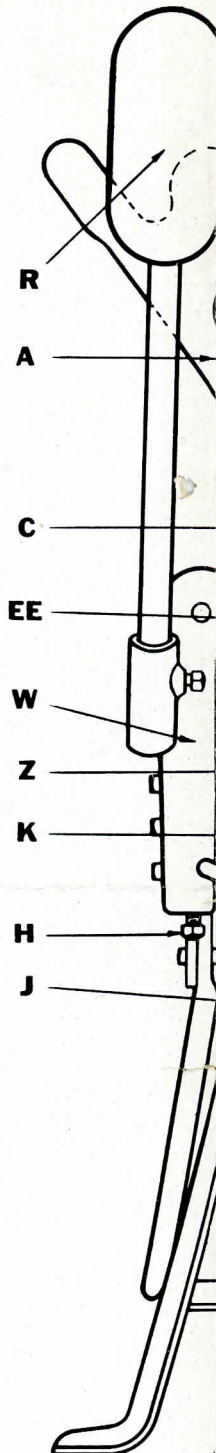


REAR VIEW

PARTS LIST

A—Clamping Handle
BB—Set Screw
C—Top Shaft
DD—Link
EE—Link Adj. Block
FF—Set Screw
GG—Stop Gauge Rod
H—Set Screw
J—Set Screw
K—Stop Gauge Casting

L—Slot Casting Pin
M—Set Screw
N—Slot Casting
O—Cap Screw
P—Set Screw
Q—Adjustable Stop
R—Balance Weight
S—SS—Removable Angle Bar
U—Bending Leaf $\frac{1}{4}$ " Bar
U-5—Inner $\frac{1}{4}$ " Bending Leaf Bar



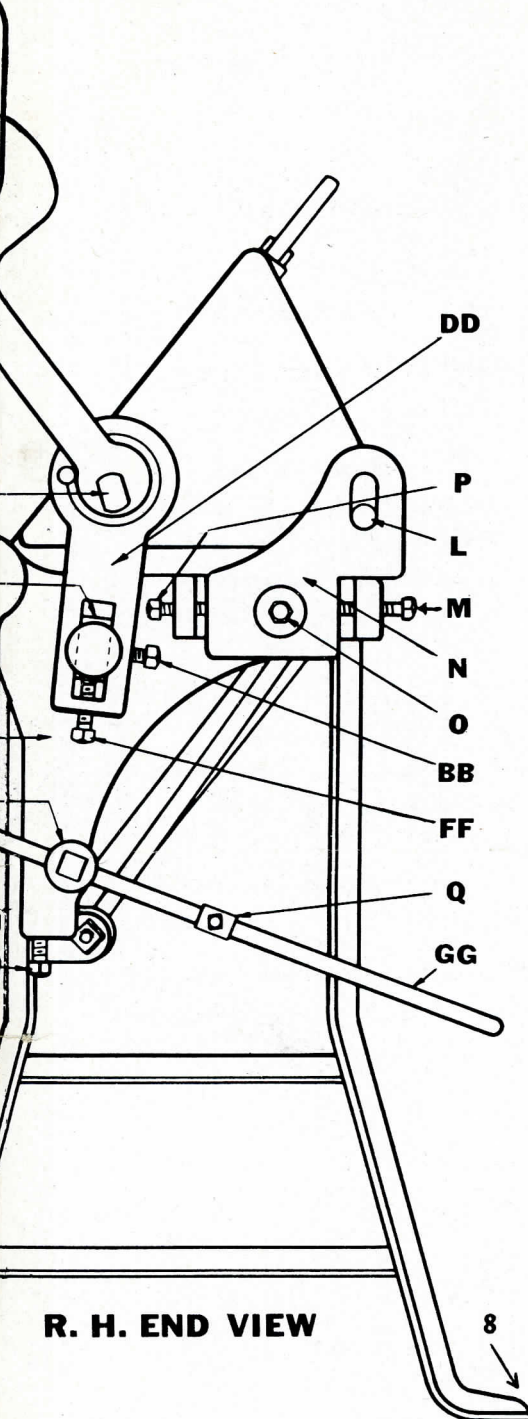
NO

When ordering
give size and
number of machine
advise whether
or Left Hand
machine.

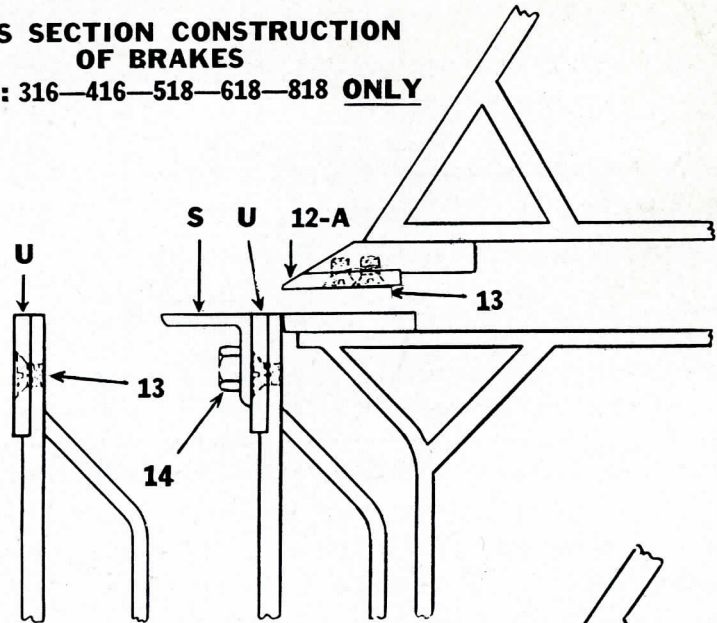
STANDARD HAND BRAKES



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OF BRAKES**
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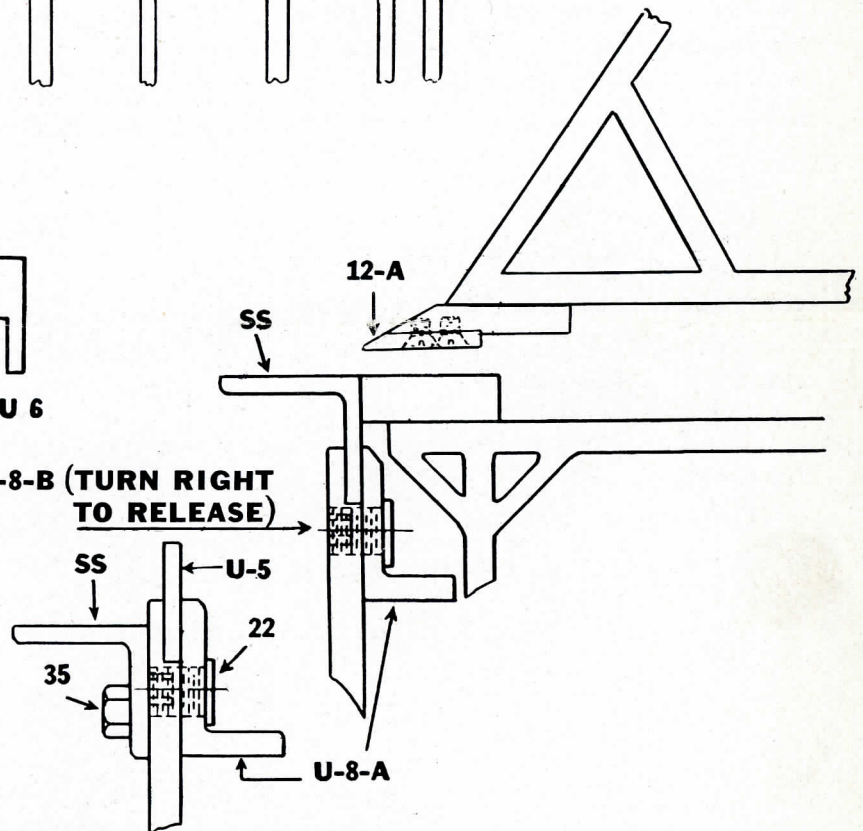


R. H. END VIEW



U-5 U-6

**U-8-B (TURN RIGHT
TO RELEASE)**



PARTS LIST

- U-6—Outer 1/2" Bending Leaf Bar
- U-8-A—Bending Leaf Bar Holder
- U-8-B—Flanged Hand Screw (Turn Right to Release)
- V—Formers (Specify Sizes)
- W—Bending Leaf Casting
- X—Set Screw
- Y—Former Friction Clamps
- Z—Bed End Casting
- 12-A—Bevelled Bending Edge Bar

- 13—Machine Screw for (U) & (12A)
- 14—Cap Screw for (S)
- 16—Handle Tension Spring
- 17—Handle Tension Washer
- 18—Handle Tension Nut
- 19—Handle Tension Locking Screw
- 20—Bottom Shaft
- 21—Set Screw
- 22—Bar Holder S.H. Cap Screw
- 35—Cap Screw for SS

NOTE

Ordering Parts
Specify serial num-
ber of machine. Also
specify number for Right
and side facing

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attaching this angle bar in the low position for making narrow offset bends. (U-5) $\frac{1}{4}$ " bar should not be used for anything other than to bend narrow reverse flanges on material not heavier than seven gauges less than the capacity of the machine. Capacity ratings according to thickness of bending leaf edges apply to all sizes.

SHORT PIECES OF MATERIAL SHOULD BE BENT IN THE CENTER OF THE BRAKE. THIS EQUALIZES THIS STRAIN.

NEVER BEND AGAINST SEAMS UNLESS MACHINE IS SET TO CLAMP THE FULL MULTIPLE THICKNESS OF THE SEAM AND THE TOP LEAF IS SET BACK FOR CLEARANCE OF THE FULL MULTIPLE THICKNESS.

Balance weights (R) can be raised or lowered to properly counterbalance the bending leaf.

The adjustable stop gauge (GG) can be used to regulate the angle of the bend when duplicate work is made. This adjustment is made with the stop marked (Q).

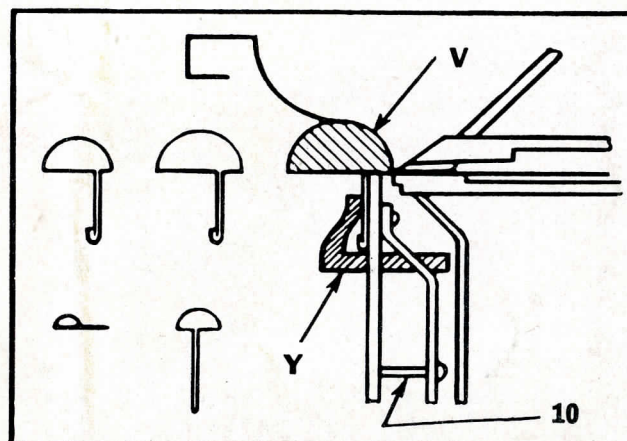
*Formers (V) shown below, are attached to the machine as shown on the sketch with the $\frac{1}{2}$ " clearance side against the bending leaf. The friction clamps (Y) are placed in position and tapped lightly with a mallet. This creates enough friction to hold the formers. To remove clamp, tap upward or turn. Formers can be obtained in half-round sizes: 3", $2\frac{1}{4}$ ", $1\frac{5}{8}$ ", 1" and $\frac{5}{8}$ ". Square bends can be made on a number of sheets and the curves bent afterwards on the formers. The wide opening of the jaw permits the sheets passing over the formers.

*Note: Formers are not standard equipment.

When forming cornices or other sections of wide girth, it is advisable to start a bend near the center or make a kink on the opposite edge from the bend made first to equalize the buckles in the sheet. The reason for this is that sheets are not always perfectly flat and if one edge is left buckled while the other edge is straightened by clamping in the Brake, the bends made later in the buckled part will straighten out this buckle and consequently, throw the first bend out of line.

Bending leaf handle can be used in two positions. Standard position is shown on front view. By removing bolt (15), handle can be moved over to an outside position so that when forming wide sheets, the sheet is not in the operator's way.

OIL WORKING PARTS OCCASIONALLY.



DREIS & KRUMP MFG. CO.
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